

### Listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A prosthetic intervertebral disc comprising:

- a) a central core material having an upper surface, a lower surface and a sidewall therebetween, and
- b) a non-resorbable one piece outer shell having an inner surface surrounding the central core and contacting the upper surface, the lower surface and the sidewall of the core, wherein ~~at least~~ one of the upper and lower surfaces of the outer shell comprises a recess for receiving a pin, and
- c) a pin received in the recess of the outer shell.

wherein the outer shell has an upper wall having an upper surface having a dry coefficient of friction against bone of at least 0.5.

2.(Original) The disc of claim 1 wherein the non-resorbable shell has an outer surface, the outer surface having an i) upper surface adapted to contact a natural upper vertebral endplate and ii) a lower surface adapted to contact a natural lower vertebral endplate.

3. (Original) The disc of claim 2 wherein the upper surface of the shell is convex, and the lower surface of the shell is flat or concave.

4. (Original) The disc of claim 2 wherein the upper and lower surfaces of the shell are convex.

5. (Previously Presented) The disc of claim 1 wherein the outer shell further comprises an upper wall having a thickness, and a side wall having a thickness, wherein the thickness of the upper wall is lower than the thickness of the side wall.

6. (Previously Presented) The disc of claim 5 wherein the thickness of the sidewall approximates a thickness of the annulus fibrosus.
7. (Original) The disc of claim 1 further comprising:
  - c) an intermediate layer between the central core and the outer shell.
8. (Original) The disc of claim 1 having no intermediate layer between the core and the outer shell.
9. (Original) The disc of claim 1 further comprises:
  - c) a radio-opaque marker disposed within the outer shell or core.
10. (cancelled)
11. (previously presented) The disc of claim 1 wherein the outer shell has a first hardness and the core has a second hardness, and wherein the first hardness is larger than the second hardness.
12. (Cancelled)
13. (Previously Presented) The disc of claim 1 wherein the upper surface of the upper wall of the outer shell has a surface roughness  $R_{\max}$  of no more than 0.15mm.
14. (Previously Presented) The disc of claim 1 wherein the upper surface of the shell is convex, and the lower surface of the shell is flat or concave.
15. (Previously Presented) The disc of claim 1 wherein the upper and lower surfaces of the shell are convex.
16. (Previously Presented) The disc of claim 1 wherein the outer shell comprises silicone.

17. (Previously Presented) The disc of claim 1 wherein the outer shell further comprises a lower wall having a lower surface, the lower surface having a dry coefficient of friction against bone of at least 0.5.

18. (Cancelled)

19. (Previously presented) The disc of claim 1 wherein the lower surface of the outer shell comprises a recess for receiving a pin.

20. (Previously presented) The disc of claim 1 wherein at least one of the upper and lower surfaces of the shell is flat.

21. (Canceled)

22. (Previously Presented) The disc of claim 1 wherein the central core and the outer shell are made of different grades of the same material.

23. (Previously Presented) The disc of claim 22 wherein the same material is silicone.

24. (Previously Presented) The disc of claim 1 wherein the central core has a first hardness and the sidewall of the outer shell has a second hardness, and wherein the first hardness is smaller than the second hardness.

25.(cancelled)

26.(cancelled)

27.(cancelled)

28. (Previously Presented) The disc of claim 1 wherein the outer shell further comprises an upper wall having a first thickness, and a side wall having a second thickness, and wherein the first thickness is smaller than the second thickness.

29. (Previously presented) The disc of claim 1 wherein the second thickness of the sidewall approximates a thickness of the annulus fibrosus.

Please add the following new claims:

30. (New) The disc of claim 1 wherein one of the upper and lower surfaces of the core comprises a recess for receiving the pin, and the pin is further received in the recess of the core.

31. The disc of claim 1 wherein the outer shell is elastomeric.

32. The disc of claim 31 wherein the elastomeric outer shell is selected from the group consisting of polyurethane and silicone.

33. The disc of claim 1 wherein the non-resorbable one piece outer shell has an inner surface that completely surrounds the central core.